Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of claims:

- 1. (currently amended) A hydraulic machine comprising a housing, a rotating group rotatably mounted within said housing and including barrel and a plurality of pistons axially slideable in cylinders in said barrel, and a swashplate assembly to engage said pistons and induce reciprocation thereof as said barrel rotates in said housing, a port plate interposed between said barrel and said housing and effective to connect respective ones of said cylinders alternatively with an inlet port and an outlet port, and a slipper assembly acting between said swashplate and said piston to transfer loads therebetween, said slipper assembly including a base having a planar bearing surface engagable with said swashplate and a spherical bearing on an oppositely directed side and engagable with a part spherical recess in said piston[[.]] said base including a spigot projecting from said oppositely directed side and said spherical bearing having a through bore to receive said spigot, said through bore having a counterbore of greater diameter than said through bore at an end thereof remote from said base to permit enlargement of said spigot to retain said spherical bearing on said spigot.
- 2. (original) A machine according to claim 1 wherein said piston is tubular and said slipper assembly includes a passageway extending through said base from said piston to said planar bearing to supply fluid thereto.
- 3. (original) A machine according to claim 2 wherein said base of slipper assembly has a diameter greater than that of said piston and said slippers are retained in engagement with said swashplate by a plate having a plurality of apertures each of which receives a respective one of said pistons and has a marginal portion overlying a respective one of said bases.
- 4. (original) A machine according to claim 3 wherein said swashplate includes an annular insert providing a planar face over which said slipper assemblies may slide.
- 5. (currently amended) A slipper assembly for a piston assembly of a rotary hydraulic machine, said slipper assembly comprising a base having a planar bearing surface disposed on one side for engagement with a swashplate and a spherical bearing disposed on an oppositely

Application No. 10/776,770

Amendment Dated: September 18, 2007

Reply to Office Action of: April 18, 2007

directed side for engagement with a part spherical recess in said piston[[.]] and said base

including a spigot projecting from said oppositely directed side and said spherical bearing

having a through bore to receive said spigot, said through bore having a counterbore of

greater diameter than said through bore at an end thereof remote from said base to permit

enlargement of said spigot to retain said spherical bearing on said spigot.

6. (original) A slipper assembly according to claim 5 wherein a passageway extends through

said spherical bearing and said base.

7. (cancelled)

8. (cancelled)

9. (currently amended) A slipper assembly according to claim [[7]]6 wherein said passageway

extends through said spigot.

10. (currently amended) A piston assembly for a rotating hydraulic machine comprising a piston

having a spherical recess at one end thereof and a slipper assembly including a base

having planar bearing surface on one side and a spherical bearing on an oppositely directed

side thereof, said spherical bearing being located within said spherical recess to provide

limited pivotal movement between said piston and slipper assembly[[.]] and said base

including a spigot projecting from said oppositely directed side and said spherical bearing

having a through bore to receive said spigot, said through bore having a counterbore of

greater diameter than said through bore at an end thereof remote from said base to permit

enlargement of said spigot to retain said spherical bearing on said spigot.

11. (original) A piston assembly according to claim 10 wherein said spherical recess has a

depth greater than the radius of said spherical bearing and walls of said recess extend

beyond an equator of said spherical bearing and conform thereto to secure said spherical

bearing in said recess.

12. (cancelled)

3

Application No. 10/776,770

Amendment Dated: September 18, 2007 Reply to Office Action of: April 18, 2007

13. (cancelled)

14. (currently amended) A piston assembly according to claim [[12]]10 wherein said piston is

tubular.

15. (currently amended) A piston assembly according to claim [[14]]10 wherein a passageway

extends through said base to permit hydraulic fluid to flow from an interior of said piston to

said planar bearing surface.

16. (currently amended) A method of forming a piston assembly for a rotary hydraulic machine

comprising the steps of forming a part spherical cavity in one end of a piston to an axial

depth greater than the diameter of said cavity, inserting therein a complementary spherical

bearing of a slipper assembly, and deforming the walls of said cavity to conform to the

surface of said spherical bearing said step of deforming said walls including the step of

applying a radial load about the equator of said spherical bearing after said walls conform to

said surface to provide a clearance between said cavity and said spherical bearing and

facilitate relative pivotal movement therebetween.

17. (cancelled)

18. (currently amended) A method according to claim [[17]]16 including the step of inserting a

spigot of a base into a bore formed in said spherical bearing and securing said spigot by

radially expanding said spigot in said bore.

4